

CLAIMS

1. A microfluid-system supporting unit, comprising a first supporting plate and at least one hollow filament constituting the channel of the microfluid system, wherein the hollow filament is placed on the first supporting plate in any shape, and a particular internal region of the hollow filament has a function.

2. The microfluid-system supporting unit according to Claim 1, wherein more than one hollow filament are placed.

3. The microfluid-system supporting unit according to Claim 1 or 2, wherein at least one hollow filament in any shape having no function in the internal particular region is placed additionally on the first supporting plate.

4. The microfluid-system supporting unit according to any one of Claims 1 to 3, wherein at least one hollow filament is placed crosswise to at least another hollow filament.

5. The microfluid-system supporting unit according to any one of Claims 1 to 4, wherein at least one hollow filament is placed crosswise to the hollow filament itself.

6. The microfluid-system supporting unit according to any one of Claims 1 to 5, further comprising a second supporting plate, wherein at least one hollow filament is held between the first and second supporting plates.

7. The microfluid-system supporting unit according to any one of Claims 1 to 6, wherein part of at least one hollow filament is exposed through at least one of the first and second supporting plates .

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8. The microfluid-system supporting unit according to any one of Claims 1 to 7, wherein at least one hollow filament has a port for at least one of receiving a fluid from outside and discharging it to outside.

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9. The microfluid-system supporting unit according to Claim 8, wherein the port is fixed to at least one of the first and second supporting plates.

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10. The microfluid-system supporting unit according to any one of Claims 1 to 9, further comprising a relay unit for connecting the hollow filaments to each other.

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11. The microfluid-system supporting unit according to any one of Claims 1 to 10, wherein a metal layer is formed on a particular region of at least one hollow filament.

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12. The microfluid-system supporting unit according to any one of Claims 1 to 11, further comprising a particular region of at least one hollow filament has a light-transmitting property.

13. The microfluid-system supporting unit according to any one of Claims 1 to 12, wherein the function of the hollow filament is a function selected from the group consisting of

adsorption-desorption, ion exchange, separation, removal, partition, and oxidation-reduction.

14. The microfluid-system supporting unit according to any
5 one of Claims 1 to 13, wherein the function is provided by fixing a filler in a particular internal region of at least one hollow filament.

15. The microfluid-system supporting unit according to any
10 one of Claims 1 to 14, wherein the function is provided by graft polymerization on a particular internal region of at least one hollow filament.

16. The microfluid-system supporting unit according to any
15 one of Claims 1 to 15, wherein the function is provided by forming a porous material in a particular internal region of at least one hollow filament.